

Remarks

Claims 1-3, 8-16, 30, 51, 52, and 57-62 are pending in the subject application and currently before the Examiner. Applicants acknowledge that claims 17-29, 31-50, and 53-56 have been withdrawn from further consideration as being drawn to a non-elected invention. By this Amendment, Applicants have amended claims 1-3, 59, 60, and 62, and added new claims 63-65. Support for the amendments and new claims can be found throughout the subject specification and in the claims as originally filed (see, for example, page 9, lines 11-15 or page 14, lines 11-17). Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 1-3, 8-16, 30, 51, 52, and 57-65 are currently before the Examiner. Favorable consideration of the pending claims is respectfully requested.

Applicants note the objection made with respect to the title of the subject application and submit, herewith, a new title for the subject application. Accordingly, reconsideration and withdrawal of the objection is respectfully requested

Claims 1-3, 8-16, 30, 51, 52, and 59-62 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Particularly, the Office Action argues that the previous amendment of claims 1-3 has introduced new matter into the claims as the percent homology limitations introduced a two step definition of the claimed polynucleotides. This two step definition has been deemed to be new matter. Applicants thank the Examiner for his careful review of the application in this regard and respectfully submit that the claims, as now presented, render this issue moot. As the Patent Office will note, support for the polynucleotides claimed via “percent identity” now recited in the claims can be found, for example, at page 9, lines 11-15 or page 14, lines 10-15, of the subject application. Accordingly reconsideration and withdrawal of this aspect of the rejection is respectfully requested.

Claim 59, parts “k)” and “l)” has also been rejected on the basis the claim introduces new matter. Particularly, the Office Action argues that the claim can be interpreted as being made up of a series of segments, such as parts (a)-(l) or (a)-(k) of claim 59 and that such a polynucleotide has not been described in the subject specification. Applicants have amended claim 59-62 to delete the language objected to by the Patent Office and have represented this subject matter in new claims 63-

65 to more clearly set forth the subject matter that was intended to be claimed by original claim 59(k) and 59(l). As the Patent Office will note, the claimed polynucleotides are directed to:

1) a polynucleotide according to claim 59 (*i.e.*, claim 59(a), claim 59(b), claim 59(c), claim 59(d), claim 59(e), claim 59(f), claim 59(g), claim 59(h), claim 59(i), or claim 59(j)) fused, in frame, to a heterologous polynucleotide sequence;

2) a polynucleotide according to claim 59(a), claim 59(b), claim 59(c), claim 59(d), claim 59(e), claim 59(f), claim 59(g), claim 59(h), claim 59(i), claim 59(j), or claim 59(k) operatively associated with a regulatory sequence that controls gene expression;

3) a vector comprising a polynucleotide according to claim 59 (*i.e.*, claim 59(a), claim 59(b), claim 59(c), claim 59(d), claim 59(e), claim 59(f), claim 59(g), claim 59(h), claim 59(i), or claim 59(j)); or

4) a polynucleotide encoding a fusion protein (e.g., a polynucleotide according to claim 59 (*i.e.*, claim 59(a), claim 59(b), claim 59(c), claim 59(d), claim 59(e), claim 59(f), claim 59(g), claim 59(h), claim 59(i), or claim 59(j)) fused, in frame, to a heterologous polynucleotide sequence) operatively associated with a regulatory sequence that controls gene expression. As the Patent office will note, the various elements of claim 59 that are to be associated with heterologous sequences, regulatory elements, or vectors are recited in the alternative. Thus, each of these elements is not connected in a “series”, rather each element is independently associated with a heterologous sequence, regulatory element, or vector. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-3, 8-16, 30, 51, 52, and 59-62 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Office Action has indicated the language “percent homology” is unclear as to whether this language relates to the specific sequences (as 100%) or to the homologous sequences (as 100%). Applicants have amended claim 1 to address this issue and respectfully submit that this issue is moot in view of the cancellation of this language and its replacement with newly presented claim 1 that clearly indicates that the claimed polynucleotides have at least 80% identity over its entire length to those polynucleotides indicated in claim 1. Claim 59 has been rejected on the basis that it is unclear as to the percentage of complementarity that is meant by the claim. Applicants have amended the claims to recite that the claimed polynucleotide sequences are

“complementary to the full length of” a polynucleotide sequence that encodes an ORF that is indicated in the claims. Claim 59(k) was rejected on the basis that the phrase “polynucleotide encoding claim 59(a) ...” is unclear. This aspect of the rejection is moot in view of the cancellation of this portion of claim 59. In view of the foregoing amendments to the claims, Applicants respectfully request reconsideration and withdrawal of the rejections.

Claim 59 has been rejected as being unpatentable under 35 U.S.C. § 102(b) over product O4253 of the Sigma Catalog. The Office Action argues that the “AAA” trimer anticipates the complement language of previously presented claim 59. Applicants respectfully disagree. The previously presented claim reads, for example, “An isolated polynucleotide sequence comprising: ...; b) a polynucleotide sequence complementary to nucleotides 112069 to 111734 of SEQ ID NO: 1; ...” Applicants submit that a reasonable interpretation of previously presented claim 59 is that the complementary sequence would be a sequence complementary to the entirety of the nucleotide span recited in the claim. For example, the claimed polynucleotide sequence is one that is complementary to the entire span of nucleotides from 112069 to 111734 of SEQ ID NO: 1 (ORF 1089). However, in the interest of expediting prosecution in this matter, Applicants have amended claim 59 to clearly indicate that the complementary sequences are those that are complementary to the full length of a recited span of nucleotides. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

It should be understood that the amendments presented herein have been made solely to expedite prosecution of the subject application to completion and should not be construed as an indication of Applicants’ agreement with or acquiescence in the Examiner’s position. Applicants expressly reserve the right to pursue the invention(s) disclosed in the subject application, including any subject matter canceled or not pursued during prosecution of the subject application, in a related application.

In view of the foregoing remarks, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

A handwritten signature in black ink, reading "Frank C. Eisenschenk". The signature is fluid and cursive, with a long horizontal line extending to the right.

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